

Claims

1. A services provisioning method providing a provisioning server, running a service consumer interface, running an entity management module, running an order processing module, running a policy & preferences module, running a registration module, running a service definitions module, running a service developer interface module, and running a service participant interface module.

2. The method of claim 1 further comprising a common provisioning model based on a shared user service lifecycle.

3. The method of claim 1 wherein running a service consumer interface further comprises interacting with external entities and that substantially isolating other provisioning modules from different protocols used by external entities.

4. The method of claim 1 wherein providing an entity management module further comprises maintaining a repository of entity information with the entity management module and substantially isolating the repository from modules other than the entity management module.

5. The method of claim 4 wherein the entity information comprises information on machines usable with the platform.

6. The method of claim 4 wherein the entity information comprises information on users of the platform.

7. The method of claim 4 wherein the entity information comprises information on entity preferences with regard to the platform.

8. The method of claim 1 wherein the entity management module is a point of contact with systems outside the provisioning server.

9. The method of claim 1 wherein the entity management module provides a user interface for access to local and network based information.

10. The method of claim 1 wherein providing an order processing module further comprises directing with the order processing module orders from service sponsors as well as from a policy & preferences module.

11. The method of claim 1 wherein providing an order processing module further comprises interacting with other modules to fulfill order requirements.

12. The method of claim 1 wherein providing an order processing module further comprises tracking order status.

13. The method of claim 1 wherein providing a registration module further comprises providing an authorization module and selectively allowing entities with proper privileges to execute transactions with the provisioning server.

14. The method of claim 1 wherein providing a registration module further comprises registering users of the provisioning server in conjunction with the entity module.

15. The method of claim 1 wherein providing a registration module further comprises substantially isolating security related artifacts of transactions via the registration module, the service consumer interface, and the order processing module.

16. The method of claim 1 wherein providing a service definitions module comprises maintaining definitional information on services provisioned by the provisioning server.

17. The method of claim 16 wherein the definitional information includes version information.

18. The method of claim 16 wherein the definitional information includes file composition.

19. The method of claim 16 wherein the definitional information includes service inter relationships.

20. The method of claim 16 wherein the definitional information includes what devices can use the services.

21. The method of claim 1 wherein providing a service developer interface module comprises supporting service developers in at least one of development, distribution, and update of services.

22. The method of claim 1 wherein the service participant interface module directs service lifecycle information to appropriate resources.

23. The method of claim 1 wherein the service participant interface module directs service transaction information to appropriate resources.

24. A services provisioning method comprising:

providing a service consumer interface;

allowing external entities access to the service consumer interface;

by using the service customer interface, substantially isolating other provisioning

modules from different protocols used by external entities;

providing an entity management module;

maintaining a repository of entity information with the entity management module;

substantially isolating the repository from modules other than the entity management module;

providing via the entity management module a user interface for access to local and network based information;

providing an order processing module;

directing with the order processing module orders from service sponsors as well as from a policy & preferences module and interacting with other modules to fulfill order requirements;

providing a registration module that maintains security of the provisioning server;

registering users of the provisioning server via the registration module in conjunction with the entity management module;

substantially isolating security related artifacts of transactions via the resgistration module, the service consumer interface, and the order processing module;

selectively allowing users with proper privileges to execute transactions with the provisioning server;

providing a service definitions module;

maintaining definitional information on services provisioned by the provisioning server with the service definitions module;

providing a service developer interface module

supporting service developers in at least one of development, distribution, and update of services; and

providing a service participant interface module that interfaces with users.

25. The method of claim 24 wherein the entity information comprises information on machines usable with the platform.

26. The method of claim 24 further comprising tracking order status with the order processing module.

27. The method of claim 24 wherein the entity information comprises information on users of the platform.

28. The method of claim 24 wherein the entity information comprises information on entity preferences with regard to the platform.

29. The method of claim 24 wherein the definitional information of the service definitions module includes version information.

30. The method of claim 24 wherein the definitional information of the service definitions module includes file composition.

31. The method of claim 24 wherein the definitional information of the service definitions module includes service inter relationships.

32. The method of claim 24 wherein the definitional information of the service definitions module includes what devices can use the services.

33. The method of claim 24 wherein providing a service participant interface module further comprises directing service lifecycle information to appropriate resources.

34. The method of claim 24 wherein providing a service participant interface module further comprises directing service transaction information to appropriate resources.

35. The method of claim 24 wherein providing a service consumer interface comprises providing a web server and allowing external entities access to the service consumer interface comprises allowing user interaction through web services.

36. The method of claim 24 providing a service consumer interface comprises routing incoming transactions to an appropriate internal resource to process the transaction.

37. The method of claim 24 wherein providing a service consumer interface comprises processing output from other modules that has been queued for a particular entity and translating the output into a required protocol required to interact with the entity.

38. A services provisioning method comprising:

using soft computing techniques comprising at least one of rules and constraints

modelling service policy logic;

developing service policy logic; and

examining service policy logic

determining whether a requesting entity is allowed to make requests;

determining whether a service bundle exists that is compatible with a device with
which the entity is associated;

where a plurality of compatible bundles exists, determining which bundle should be
used;

determining whether a requesting entity is allowed to use a requested service;

determining what an initial setting should be for at least one service parameter of the
service;

deploying the service to a device model agent of the device associated with the
requesting entity; and

monitoring for transactions from the service once the service is installed and running.

39. The method of claim 38 wherein determining whether a service bundle exists comprises comparing device parameters with service requirements.

40. The method of claim 38 further comprises receiving an add service request from an entity associated with a device.

41. The method of claim 38 further comprising determining an impact of a change to the service policy logic to existing relevant devices provisioned by the method.

42. The method of claim 41 further comprising generating, if necessary, at least one change request to the impacted devices to achieve goals of the service policy change.

43. The method of claim 41 further comprising using the change in all future Add Service transactions.

44. The method of claim 38 further comprising receiving a notification of a device configuration change.

45. The method of claim 44 further comprising deciding whether services running on the device should be changed as a result of the device configuration change.

46. The method of claim 44 further comprising deciding whether parameters of at least one service running on the device should be changed as a result of the device configuration change.

47. The method of claim 44 further comprising generating, if necessary, at least one change request for the device as required by the service policy logic in light of the device configuration change.